CLAIMS

1. A laminate (I) comprising a base layer (A) and an adhesive layer (B) formed on one side or both sides of the layer A, wherein

the layer A is a film made of (A-1) a wholly aromatic polyimide (PI^{A-1}) having a glass transition point of 350°C or higher or (A-2) a wholly aromatic polyamide (PA^{A-2}) having a glass transition point of 350°C or higher; and

the layer B comprises (B-1) a wholly aromatic polyimide (PI^{B-1}) having a glass transition point of 180°C or higher and lower than 350°C, (B-2) a wholly aromatic polyamide (PA^{B-2}) having a glass transition point of 180°C or higher and lower than 350°C, or (B-3) a resin composition (RC^{B-3}) comprising a wholly aromatic polyimide (PI^{B-3}) and a wholly aromatic polyamide (PA^{B-3}) having a glass transition point of 180°C or higher and lower than 350°C.

2. The laminate according to claim 1 which has two right-angled directions with a Young's modulus of more than 3 GPa in the plane.

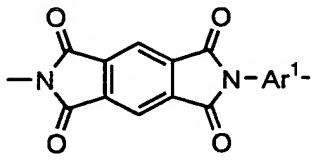
3. The laminate according to claim 1, wherein the layer A is a film which has two right-angled directions with a Young's modulus of more than 10 GPa in the plane.

4. The laminate according to claim 1, wherein the layer A is a film which has a linear thermal expansion coefficient of -12 ppm/°C to 12 ppm/°C.

5. The laminate according to claim 1, wherein the average thickness of the layer A is 50 μm or less.

6. The laminate according to claim 1, wherein the wholly

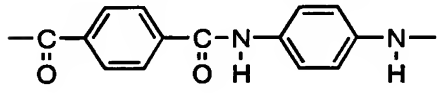
aromatic polyimide (PI^{A-1}) having a glass transition point of 350° C or higher (A-1) of the layer A comprises a constituent unit represented by the following formula (I):



(I)

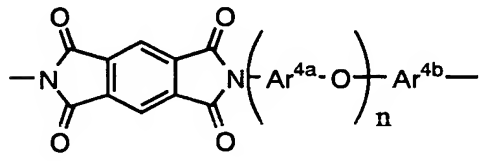
wherein Ar^1 is a 1,4-phenylene group which may contain a non-reactive substituent.

7. The laminate according to claim 1, wherein the wholly aromatic polyamide (PA^{A-2}) having a glass transition point of 350° C or higher (A-2) of the layer A comprises a constituent unit represented by the following formula (II):



(II)

8. The laminate according to claim 1, wherein the wholly aromatic polyimide (PI^{B-1}) having a glass transition point of 180° C or higher and lower than 350° C (B-1) of the layer B comprises a constituent unit represented by the following formula (IV):

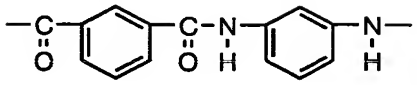


(IV)

wherein Ar^{4a} and Ar^{4b} are each independently an aromatic group having 6 to 20 carbon atoms which may contain a non-reactive substituent, and n is 1 or 2.

9. The laminate according to claim 1, wherein the wholly aromatic polyamide (PA^{B-2}) having a glass transition point of 180° C or higher and lower than 350° C (B-2) of the layer B comprises a constituent unit represented by the following

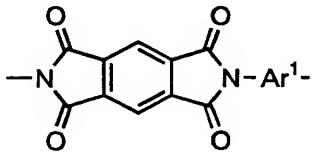
formula (III):



(III)

10. The laminate according to claim 1, wherein the resin composition (RC^{B-3}) comprises 10 to 99 wt% of the wholly aromatic polyimide (PI^{B-3}) and 1 to 90 wt% of the wholly aromatic polyamide (PA^{B-3}) having a glass transition point of 180°C or higher and lower than 350°C.

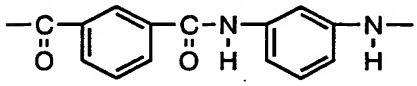
11. The laminate according to claim 10, wherein the wholly aromatic polyimide (PI^{B-3}) constituting the resin composition (RC^{B-3}) comprises a constituent unit represented by the following formula (I):



(I)

wherein Ar^1 is a 1,4-phenylene group which may contain a non-reactive substituent.

12. The laminate according to claim 10, wherein the wholly aromatic polyamide (PA^{B-3}) constituting the resin composition (RC^{B-3}) comprises a constituent unit represented by the following formula (III):



(III)

13. The laminate according to claim 1, wherein the layer A comprises PI^{A-1} and the layer B comprises PI^{B-1}.

14. The laminate according to claim 1, wherein the layer A comprises PI^{A-1} and the layer B comprises PA^{B-2}.

15. The laminate according to claim 1, wherein the layer A comprises PI^{A-1} and the layer B comprises the resin composition (RC^{B-3}) comprising PI^{B-3} and PA^{B-3}.

16. The laminate according to claim 1, wherein the layer A comprises PA^{A-2} and the layer B comprises PI^{B-1}.

17. The laminate according to claim 1, wherein the layer A comprises PA^{A-2} and the layer B comprises PA^{B-2}.

18. The laminate according to claim 1, wherein the layer A comprises PA^{A-2} and the layer B comprises the resin composition (RC^{B-3}) comprising PI^{B-3} and PA^{B-3}.

19. A laminate (II) of claim 1 wherein the layer B is formed on one side of the layer A, and an adherend layer (C) is formed on the layer B.

20. The laminate according to claim 19, wherein the layer C comprises an inorganic material.

21. The laminate according to claim 19, wherein the layer C comprises a silicon wafer or a metal.

22. A laminate (III) of claim 1 comprising a base layer (A), an adhesive layer (B), an adherend layer (C), an organic protective layer (D) and layer (E) to be treated, wherein the layers B and C are formed on one side of the layer A in the mentioned order, and the layers D and E are formed on the other side of the layer A in the mentioned order.

23. The laminate according to claim 22, wherein the layer D comprises a polyimide.

24. The laminate according to claim 22, wherein the layer E comprises a silicon wafer.

25. A process for manufacturing a laminate (V) comprising a layer D and layer E (E') to be treated from the laminate (III) of claim 22, comprising the steps of:

(1) treating the exterior surface of the layer E of the laminate (III) to obtain a laminate (III') comprising a layer E';

(2) maintaining the laminate (III') at a temperature of 350° C or higher;

(3) removing the layer C from the laminate (III') to obtain a laminate (IV) comprising layers B, A, D and E'; and

(4) disassembling the laminate (IV) at the interface between the layer A and the layer D to obtain a laminate (V) comprising the layers D and E'.

26. The manufacturing process according to claim 25, wherein the layer C is removed by irradiating ultrasonic waves.

27. The manufacturing process according to claim 25, wherein the laminate (III') immersed in water is irradiated with ultrasonic waves for 30 seconds or longer to remove the layer C.

28. The manufacturing process according to claim 25, wherein the treatment of the exterior surface of the layer E is to reduce the thickness of the layer E.

29. The manufacturing process according to claim 25, wherein the layer E is a semiconductor substrate having circuit parts formed thereon.